

AGENCY OF NATURAL RESOURCES

Waterbury, Vermont

ENVIRONMENTAL PROTECTION REGULATIONS

CHAPTER 5

AIR POLLUTION CONTROL

Subchapter V. Review of New Air Contaminant Sources

Section 5-502 Major Stationary Sources and Major Modifications

(1) Applicability

- (a) This section applies to all major stationary sources and major modifications which are constructed subsequent to July 1, 1979 and are subject to review under Section 5-501 herein.
- (b) Where a source is constructed or modified in increments
 - (i) which individually are not subject to review under this section,
 - (ii) which have not previously been aggregated for purposes of their review under this section, and
 - (iii) which are not a part of a program of construction or modification in planned incremental phases previously approved by the Secretaryall such increments shall be added together for determining the applicability of this section.

(2) Prohibition

No person shall initiate construction of any major stationary source or major modification until the applicable requirements of this section have been complied with and an order approving construction has been issued in accordance with Section 5-501 herein.

(3) Most Stringent Emission Rate

- (a)
 - (i) Each major stationary source shall apply control technology adequate to achieve the most stringent emission rate with respect to those air contaminants for which it would have significant allowable emissions.
 - (ii) Each major modification shall apply control technology adequate to achieve the most stringent emission rate with respect to any air contaminant for which there would be a significant increase in actual emissions at the source, but only for those proposed physical or operational changes which would contribute to increased emissions of the air contaminant.
 - (b) Any source or modification subject to this section shall submit information at the time it applies for approval to construct to establish that the most stringent emission rate will be achieved.
- (4) Air Quality Impact Evaluation
 - (a) A source or modification subject to this section with respect to any air contaminant other than volatile organic compounds, shall submit to the Secretary an air quality impact evaluation at the time it applies for approval to construct under Section 5-501 herein.
 - (b) The evaluation shall demonstrate that the increase in allowable emissions will not cause violations of any applicable ambient air quality standard in any area for total suspended particulate, PM_{10} , sulfur dioxide, nitrogen oxides, carbon monoxide, or lead, and will not significantly contribute to a violation of any applicable ambient air quality standard in a nonattainment area for the above air contaminants. A source or modification will be considered to significantly contribute to a violation of any ambient air quality standard for the above air contaminants if the increase in the allowable emissions from the source or modification will cause any increase in ambient concentrations of the above air contaminants in the nonattainment area in excess of any of the levels of significant impact shown in Table 3 herein. If a source or modification will significantly contribute to such a violation, the evaluation shall demonstrate that the source or modification will comply with the requirements of paragraph (6) herein.
 - (c) The evaluation shall demonstrate that, as of the source's or modification's start-up date, the increase in allowable emissions, in conjunction with all other applicable emissions increases or reductions, will not cause or contribute to any increase in ambient concentrations exceeding the remaining available prevention of significant deterioration (PSD) increment for the specified air contaminants, as determined by the Secretary. A demonstration under this paragraph is not required if a source is modified, but there is no net increase in the source's

allowable emissions of the air contaminants specified in Table 2.

- (d) The evaluation shall demonstrate that the increase in allowable emissions will not cause an adverse impact on visibility in any sensitive area or in any Class I Federal area and will not interfere with reasonable progress toward the remedying of existing man-made visibility impairment in a sensitive area. Said demonstration shall be submitted to the Agency and the appropriate Federal Land Manager at least 60 days prior to the close of the public comment period on the source or modification.
- (e) Any air quality impact evaluation or modeling required by this section shall be prepared in accordance with procedures acceptable to the Secretary and with Section 5-406 of these regulations. The evaluation shall exclude the effect of that portion of the height of any stack which exceeds good engineering practice and the effect of any other dispersion technique.

(5) Increment Allocation

- (a) The evaluation required in paragraph (4)(c) above shall demonstrate that the increase in allowable emissions thereunder will not consume more than 25% of the remaining annual PSD increment, nor more than 75% of the remaining 24 hour PSD increment for the specified air contaminants.
- (b) The remaining available PSD increment, in either case, shall be determined by the Secretary.
- (c) Once a source has demonstrated that it will comply with paragraph (5)(a) above, the appropriate portions of the PSD increments shall be allocated in accordance with procedures established by the Secretary, which may provide for local or regional participation.

(6) Emission Reductions

- (a) The Secretary shall not issue an order approving construction of any source or modification subject to this section if the source or modification is unable to demonstrate, as required under Paragraph (4), that the increase in allowable emissions from it will not significantly contribute to a violation of any applicable ambient air quality standard unless, prior to issuance of any such order:
 - (i) the source owner or operator secures legally binding offsetting emission reductions, not otherwise to be utilized as part of the State's attainment strategies, of the air contaminant contributing to such a violation from existing sources located in or impacting on the same area (whether or not

under the same ownership) such as to provide a net emission reduction acceptable to the Secretary, and

- (ii) the source owner or operator certifies that all existing sources of the source owner located in the State are in compliance with all applicable rules or are meeting all steps of any compliance schedules contained in any administrative orders or court decrees.
- (b) Regardless of whether a source or modification is subject to the requirements of paragraph (6)(a) of this section, the Secretary shall not issue an order approving construction of any source or modification subject to this section that has allowable emission of 100 tons per year or more of nitrogen oxides unless, prior to issuance of such order, the owner or operator of said source shall:
- (i) secure legally binding offsetting emission reductions (not otherwise required by law) of nitrogen oxides from existing sources,
 - (ii) obtain an offset ratio of a minimum of 1.15:1, and
 - (iii) certify that all existing sources of the source owner located in the state are subject to emissions limitations and are in compliance, or on an enforceable schedule for compliance with all applicable emissions limitations and standards.
- (c) Only emission reductions that meet the following criteria shall be eligible for use as offsetting emission reductions under Section 5-502(6):
- (i) Emission reductions of a contaminant may only be used to offset emissions of the same contaminant. Emission reductions of particulate matter may only be used to offset emissions of equally or less hazardous forms of particulate matter.
 - (ii) Emission reductions shall be real, surplus, quantifiable, permanent, and state and federally enforceable.
 - (iii) Emission reductions must have occurred after January 1, 1990, or within five years previous to the date of any application under this section in which the reduction is proposed to be used, whichever is more recent.
 - (iv) Emissions from sources which have been issued permits but never operated, or which have engaged in normal operations for less than one (1) year, may not be used as offsetting emission reductions.
 - (v) The emission reductions-creating source must be subject to state

enforceable permit or contract conditions containing specific emission limitations, which ensure that the emission reductions will be provided in accordance with the provisions of this section and will continue for the reasonably expected life of the proposed source.

- (vi) If the emission reduction is created from the shutdown of a source not subject to permits, offset requirements or enforceable production constraints, such that the demand for the services or its product could merely shift to other similar sources in the state with no decrease in emissions state-wide, the applicant shall demonstrate that such reductions will not result in such a shift.
 - (d)
 - (i) Ten percent of all actual emission reductions identified by an existing source for use as an offsetting emission reduction will revert to the Agency for its use as it sees fit, except as provided below.
 - (ii) If actual emission reductions would result from the shutdown or production curtailment by an owner or operator of a source with a consequential loss of jobs in Vermont, or the transfer of jobs outside the state:
 - (A) Such emission reductions cannot be approved for use as offsetting emission reduction;
 - (B) The full amount of the reduction will revert to the Agency; and
 - (C) Any permit in force for such source will be revoked or modified appropriately by the Secretary.
- (7) Emission Reduction Credits for Nitrogen Oxides
- (a) The owner or operator of a source at which a reduction in emissions of nitrogen oxides has occurred may apply to the Secretary for certification of the reduction as an emission reduction credit. Once certified by the Secretary, an ERC may be used to offset increased emissions from new or modified sources or for other purposes approved by the Secretary.
 - (b) Only emission reductions that meet the eligibility criteria specified in Section 5-502(6)(c) and the requirements of Section 5-502(6)(d) may be certified as ERC's.
 - (c) For emission reductions created prior to the effective date of this section, an application for certification shall be submitted within nine months from the effective date of this section. For emission reductions created after the effective date of this section, an application for certification shall be submitted within 18

months after the emission reduction occurs.

- (d) Emission reductions may be certified as ERC's only after the reductions have actually occurred.
- (e) In order to confirm emission reductions claimed in conjunction with an application for ERC certification, the Secretary may require the submission of production, fuel use or other records or emissions testing or the use of continuous emissions monitoring or other appropriate means of measurement. The same or an equivalent method of measurement shall be used to quantify emissions both before and after the reduction.

(8) Ambient Air Quality Monitoring

- (a) A major stationary source or major modification required to submit an air quality impact evaluation shall include in such evaluation an analysis of ambient air monitoring data for any attainment areas impacted by each of the following air contaminants;
 - (i) For the source, each contaminant for which it would have significant allowable emissions;
 - (ii) For the modification, each contaminant for which it would result in a significant increase in actual emissions.
- (b) Ambient monitoring data shall be based on sampling conducted for a time period of up to one year immediately preceding submission of any application for approval to construct such a source or modification. Ambient monitoring data collected for a time period of less than one year or for a time period other than immediately preceding submission of any such application may be acceptable if such data is adequate for determining whether the source or modification will cause a violation of any applicable ambient air quality standard or consume more than the remaining available PSD increment.
- (c) Subparagraphs (a) and (b) above shall not apply to any air contaminant for which no ambient air quality standard has been adopted.